1. <u>6143278</u> . 23 Feb 98; 07 Nov 00. Topical application of opioid analgesic drugs such as morphine. Elkhoury; George F 424/45; 424/43 424/484 424/485 424/486 424/487 424/488 514/282 514/812 514/944 <u>514/946</u> 514/947 514/969. A61K009/12 A61K009/06 A61K031/485 .
2. <u>6121329</u> . 27 Aug 97; 19 Sep 00. Topical administration of 2-amino-2-(2-(4-octylphenyl)ethyl)propane-1,3-diol. Fujii; Tsuneo, et al. 514/653; 424/400 424/427 424/443 424/45 514/885 514/886 514/912 <u>514/946</u> 514/947 514/966 514/969. A61K033/24 A01N059/16.
3. <u>6011022</u> . 21 May 98; 04 Jan 00. Topical application of muscarinic analgesic drugs such as neostigmine. El Khoury; George F 514/78; 514/940 <u>514/946</u> 514/947 514/969. A61K031/66.
4. <u>6004579</u> . 04 Sep 97; 21 Dec 99. Compositions which inhibit apoptosis, methods of making the compositions and uses thereof. Bathurst; Ian C., et al. 424/450; 424/401 435/1.1 435/1.2 <u>514/75</u> 514/78 514/844 514/863 514/880. A61K009/127.
5. <u>5981606</u> . 05 Feb 98; 09 Nov 99. Therapeutic TGF-beta-wound healing compositions and methods for preparing and using same. Martin; Alain. 514/724; 514/458 514/725 <u>514/946</u> 514/947. A61K031/045 A61K031/07 A61K031/355.
6. <u>5972911</u> . 26 May 92; 26 Oct 99. Composition for the delivery of orally administered drugs and other substances. Yesair; David W 514/77; 514/558 514/560 <u>514/946</u> 514/947. A61K031/685 A61K031/20.
7. <u>5874479</u> . 05 Feb 98; 23 Feb 99. Therapeutic permeation enhanced-wound healing compositions and methods for preparing and using same. Martin; Alain. 514/724; 514/458 514/725 <u>514/946</u> 514/947. A61K031/045 A61K031/07 A61K031/355.
8. <u>5116606</u> . 24 May 90; 26 May 92. Skin treatment method and solution. Alt; John P 514/458; 424/680 514/563 <u>514/642</u> 514/859 514/864 514/880 514/881. A61K007/06 A61K007/075 .
9. <u>5057497</u> . 13 Jul 89; 15 Oct 91. Oral method for the maintenance of healthy gingival tissues using TRF. Calam; Henry D., et al. 514/21; 424/49 424/50 424/559 424/562 514/12 514/900 514/901 514/902 <u>514/946</u> 514/947 514/969. A61K007/16 A61K035/54 A61K037/22.

- 10. <u>4976967</u>. 21 Nov 88; 11 Dec 90. Resin modulated drug delivery device for the delivery of HMG-CoA reductase inhibitor salts. McClelland; Gregory A., et al. 424/473; 424/457 424/474 <u>514/946</u>. A61R009/24.

 11. <u>4973579</u>. 16 Feb 89; 27 Nov 90. Enhancment of absorption of drugs from gastrointestinal tract using <u>choline</u> ester salts. Alexander; Jose, et al. 514/49; 514/263.34 514/43 514/45 514/46 514/788 <u>514/946</u>. A61K031/70 A61K031/52 A61K047/00.

 12. <u>4822773</u>. 20 Dec 87; 18 Apr 89. Enhancement of absorption of drugs from gastrointestinal tract using <u>choline</u> ester salts. Alexander; Jose, et al. 514/3; 514/11 514/15 514/2 514/561 514/565 514/567 <u>514/946</u> 514/947 930/21 930/270. A61K037/26 A61K037/00 A61K031/195.
- 13. <u>4729989</u>. 28 Jun 85; 08 Mar 88. Enhancement of absorption of drugs from gastrointestinal tract using <u>choline</u> ester salts. Alexander; Jose, et al. 514/192; 514/193 514/194 514/195 514/196 514/197 514/198 514/199 514/200 514/201 514/202 514/203 514/205 514/206 514/207 514/208 514/209 514/4 <u>514/946</u> 514/947 930/21 930/270. A61K031/43 A61K031/545.

Structure Search

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

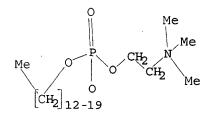
Uploading C:\Documents and Settings\sgraham\Desktop\STN structures\09974519.str

L1 STRUCTURE UPLOADED

=> d l1

L1 HAS NO ANSWERS

L1 STR



Structure attributes must be viewed using STN Express query preparation.

=> s<u>ll sss</u> sam

SAMPLE SEARCH INITIATED 10:16:17 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 537 TO ITERATE

100.0% PROCESSED 537 ITERATIONS

2 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**

BATCH **COMPLETE**

PROJECTED ITERATIONS:

9350 TO 12130

PROJECTED ANSWERS:

2 TO 124

L2

(2) SEA SSS SAM L1

=> d 12 1-2

L2 ANSWER 1 OF 2 REGISTRY COPYRIGHT 2007 ACS on STN

RN 933064-08-5 REGISTRY

ED Entered STN: 29 Apr 2007

CN 2H-Tetrazolium, 3-(1-naphthalenyl)-2,5-diphenyl-, chloride (1:1), mixt. with 2-[[(hexadecyloxy)hydroxyphosphinyl]oxy]-N,N,N-trimethylethanaminium inner salt (CA INDEX NAME)

OTHER NAMES:

CN Miltefosine-Tetrazolium violet mixture

MF C23 H17 N4 . C21 H46 N O4 P . Cl

CI MXS

SR CA

LC STN Files: CA, CAPLUS

CM 1

CRN 58066-85-6 CMF C21 H46 N O4 P

Me-
$$(CH_2)_{15}$$
- O- P- O- CH_2 - CH_2 - $N+Me_3$

CM 2

CRN 1719-71-7 (134102-55-9) CMF C23 H17 N4 . C1

● Cl -

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L2 ANSWER 2 OF 2 REGISTRY COPYRIGHT 2007 ACS on STN

RN 80078-44-0 REGISTRY

ED Entered STN: 16 Nov 1984

CN Ethanaminium, 2-[[(hexadecyloxy)hydroxyphosphinyl]oxy]-N,N,N-trimethyl-, hydroxide (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Choline phosphate, hexadecyl ester, hydroxide (6CI)

MF C21 H47 N O4 P . H O

LC STN Files: CA, CAOLD, CAPLUS, IMSPATENTS, IMSRESEARCH, TOXCENTER CRN (82721-45-7)

$$\begin{array}{c} \text{Me-} \; (\text{CH}_2)_{\, 15} - \text{O-} \, \begin{array}{c} \text{OH} \\ | \\ \text{P-} \; \text{O-} \; \text{CH}_2 - \text{CH}_2 - \text{N+Me}_3 \\ || \\ \text{O} \end{array}$$

OH-

- 6 REFERENCES IN FILE CA (1907 TO DATE)
- 6 REFERENCES IN FILE CAPLUS (1907 TO DATE)
- 2 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

=> s l1 sss full

FULL SEARCH INITIATED 10:17:48 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 10692 TO ITERATE

100.0% PROCESSED 10692 ITERATIONS SEARCH TIME: 00.00.01

36 ANSWERS

L3

(36) SEA SSS FUL L1

=> d scan 13

L3 36 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN

IN Ethanaminium, 2-[[(eicosyloxy)hydroxyphosphinyl]oxy]-N,N,N-trimethyl-,
hydroxide (9CI)

MF C25 H55 N O4 P . H O

Me-
$$(CH_2)_{19}$$
-O-P-O- CH_2 - CH_2 - $N+Me_3$

● OH-

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

L3 36 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN

MF C21 H46 N O4 P

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):end

=> help roles

Super roles, available in all indexed documents in CAplus or CA from 1967 to the present, are also searchable in the REGISTRY and ZREGISTRY files. Roles are CAS indexing terms consisting of codes that describe the new or novel information reported about a specific substance or a a non-specific derivative of a specific substance. Enter HELP ROLES at an arrow prompt in CAplus or CA for more information about CAS roles.

CAS super roles may be searched in the REGISTRY or ZREGISTRY file in the following search fields:

Search Field Name

Search Code Display Code

Super roles for specific substances /RL RL Super roles for non-specific /RLD RLD derivatives

Super roles for specific substances and non-specific derivatives	/RLS	RLS
Super roles for specific substances from patents	/RL.P	RL.P
Super roles for non-specific	/RLD.P	RLD.P
derivatives from patents	•	
Super roles for specific substances	/RLS.P	RLS
and non-specific derivatives		
from patents		
Super roles for specific substances	/RL.NP	RL.NP
from non-patent documents		
Super roles for non-specific	/RLD.NP	RLD.NP
derivatives from non-patent documents		
Super roles for specific substances	/RLS.NP	RLS
and non-specific derivatives		
from non-patent documents		

List of CAS Super Roles searchable in REGISTRY/ZREGISTRY

Code Phrase

Analytical Study ANST BIOL Biological Study CMBI Combinatorial Study FORM Formation, Nonpreparative MSC Miscellaneous OCCU Occurrence PREP Preparation PROC Process PRP Properties RACT Reactant or Reagent USES Uses

=> file caplus
COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 181.85 184.58

FULL ESTIMATED COST

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=> <u>s</u> 13/uses

```
592 L3
       6658737 USES/RL
           328) L3/USES
L4
                  (L3 (L) USES/RL)
=> d scan 14
L4
      328 ANSWERS
                    CAPLUS COPYRIGHT 2007 ACS on STN
     1-6 (Pharmacology)
CC
TI
     Hexadecylphosphocholine disrupts cholesterol homeostasis and induces the
     accumulation of free cholesterol in HepG2 tumor cells
ST
     hexadecylphosphocholine antitumor phospholipid cholesterol membrane
     apoptosis tumor
IT
     Esterification
        (cholesterol; hexadecylphosphocholine disrupts cholesterol homeostasis
        and induces accumulation of free cholesterol in HepG2 tumor cells)
ΙT
     Antitumor agents
     Apoptosis
     Cell membrane
     DNA fragmentation
     Human
     Neoplasm
        (hexadecylphosphocholine disrupts cholesterol homeostasis and induces
        accumulation of free cholesterol in HepG2 tumor cells)
IT
     Phospholipids, biological studies
     Sphingomyelins
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (hexadecylphosphocholine disrupts cholesterol homeostasis and induces
        accumulation of free cholesterol in HepG2 tumor cells)
IT
     57-88-5, Cholesterol, biological studies
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (esterification; hexadecylphosphocholine disrupts cholesterol
        homeostasis and induces accumulation of free cholesterol in HepG2 tumor
        cells)
IT
     9027-63-8, Acyl CoA cholesterol acyltransferase
                                                        169592-56-7, Caspase-3
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (hexadecylphosphocholine disrupts cholesterol homeostasis and induces
        accumulation of free cholesterol in HepG2 tumor cells)
ΙT
     58066-85-6, Hexadecylphosphocholine
     RL: DMA (Drug mechanism of action); PAC (Pharmacological activity); THU
     (Therapeutic use); BIOL (Biological study); USES (Uses)
        (hexadecylphosphocholine disrupts cholesterol homeostasis and induces
        accumulation of free cholesterol in HepG2 tumor cells)
HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1
      328 ANSWERS
                    CAPLUS COPYRIGHT 2007 ACS on STN
L4
CC
     10-5 (Microbial, Algal, and Fungal Biochemistry)
TТ
     Choline transport in Leishmania major promastigotes and its inhibition by
     choline and phosphocholine analogs
ST
     leishmanicide choline phosphochloine analog; choline transport inhibitor
     leishmanicide activity promastigote
IT
     Leishmania major
     Protonmotive force
        (choline transport in Leishmania major promastigotes and its inhibition
        by choline and phosphocholine analogs)
IT
     Protozoacides
        (leishmanicides; choline transport-inhibiting choline and
        phosphocholine analogs in relation to)
TΤ
     Development, microbial
        (promastigote; choline transport in Leishmania major promastigotes and
        its inhibition by choline and phosphocholine analogs)
IT
     Biological transport
        (uptake, carrier-mediated; choline transport in Leishmania major
```

```
promastigotes and its inhibition by choline and phosphocholine analogs)
·IT
     62-49-7, Choline
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (choline transport in Leishmania major promastigotes and its inhibition
        by choline and phosphocholine analogs)
ΙT
     56-54-2, Quinidine
                          57-09-0, CTAB
                                           83-89-6, Quinacrine
                                                                  130-95-0,
              312-45-8, Hemicholinium-3 541-22-0, Decamethonium bromide
     1119-94-4, DTAB
                       1120-02-1, OTAB 58066-85-6, Miltefosine
     70641-51-9, Edelfosine
     RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (choline transport in Leishmania major promastigotes and its inhibition
        by choline and phosphocholine analogs)
HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):0
=> s 14 and py<=2000
      20934507 PY<=2000
           (118)L4 AND PY<=2000
(L5)
=> s 15 and (phospholipase C or lecithinase or phosphocoline or
phosphatidylinositol) and (epithili? or interstitial or intercellula? or
paracellula? or permeab?)
         46572 PHOSPHOLIPASE
          4940 PHOSPHOLIPASES
         47631 PHOSPHOLIPASE
                  (PHOSPHOLIPASE OR PHOSPHOLIPASES)
       3678349 C
         20707 PHOSPHOLIPASE C
                  (PHOSPHOLIPASE (W) C)
           969 LECITHINASE
            58 LECITHINASES
           988 LECITHINASE
                  (LECITHINASE OR LECITHINASES)
            15 PHOSPHOCOLINE
             1 PHOSPHOCOLINES
            16 PHOSPHOCOLINE
                  (PHOSPHOCOLINE OR PHOSPHOCOLINES)
         35541 PHOSPHATIDYLINOSITOL
         15708 PHOSPHATIDYLINOSITOLS
         42635 PHOSPHATIDYLINOSITOL
                  (PHOSPHATIDYLINOSITOL OR PHOSPHATIDYLINOSITOLS)
            24 EPITHILI?
         66467 INTERSTITIAL
         11518 INTERSTITIALS
         71082 INTERSTITIAL
                  (INTERSTITIAL OR INTERSTITIALS)
         34655 INTERCELLULA?
          2811 PARACELLULA?
        238218 PERMEAB?
L6
               L5 AND (PHOSPHOLIPASE C OR LECITHINASE OR PHOSPHOCOLINE OR PHOSP
               HATIDYLINOSITOL) AND (EPITHILI? OR INTERSTITIAL OR INTERCELLULA?
               OR PARACELLULA? OR PERMEAB?)
=> <u>s 15</u> and (phospholipase C or lecithinase or phosphocoline or
phosphatidylinositol or epithili? or interstitial or intercellula? or paracellula?
or permeab?)
         46572 PHOSPHOLIPASE
          4940 PHOSPHOLIPASES
         47631 PHOSPHOLIPASE
                  (PHOSPHOLIPASE OR PHOSPHOLIPASES)
       3678349 C
         20707 PHOSPHOLIPASE C
                 (PHOSPHOLIPASE (W) C)
```

```
969 LECITHINASE
            58 LECITHINASES
           988 LECITHINASE
                 (LECITHINASE OR LECITHINASES)
            15 PHOSPHOCOLINE
             1 PHOSPHOCOLINES
            16 PHOSPHOCOLINE
                 (PHOSPHOCOLINE OR PHOSPHOCOLINES)
         35541 PHOSPHATIDYLINOSITOL
         15708 PHOSPHATIDYLINOSITOLS
         42635 PHOSPHATIDYLINOSITOL
                 (PHOSPHATIDYLINOSITOL OR PHOSPHATIDYLINOSITOLS)
            24 EPITHILI?
         66467 INTERSTITIAL
         11518 INTERSTITIALS
         71082 INTERSTITIAL
                 (INTERSTITIAL OR INTERSTITIALS)
         34655 INTERCELLULA?
          2811 PARACELLULA?
        238218 PERMEAB?
L7
           (11)L5 AND (PHOSPHOLIPASE C OR LECITHINASE OR PHOSPHOCOLINE OR PHOSP
               HATIDYLINOSITOL OR EPITHILI? OR INTERSTITIAL OR INTERCELLULA?
              OR PARACELLULA? OR PERMEAB?)
=> dscan 1-11
DSCAN IS NOT A RECOGNIZED COMMAND
The previous command name entered was not recognized by the system.
For a list of commands available to you in the current file, enter
"HELP COMMANDS" at an arrow prompt (=>).
=> dscan 17 1-11.
DSCAN IS NOT A RECOGNIZED COMMAND
The previous command name entered was not recognized by the system.
For a list of commands available to you in the current file, enter
"HELP COMMANDS" at an arrow prompt (=>).
=> d scan 17 1-11
'1-11' IS NOT A VALID FORMAT FOR FILE 'CAPLUS'
L7
      11 ANSWERS
                   CAPLUS COPYRIGHT 2007 ACS on STN
     1-6 (Pharmacology)
CC
TI
     The interference effects of hexadecylphosphocholine on proliferation and
     membrane phospholipid metabolism in human myeloid leukemia cell lines
ST
     antitumor leukemia cell membrane phospholipid hexadecylphosphocholine
IT
     Antitumor agents
        (leukemia; membrane phospholipid metabolism effect on antiproliferative
        sensitivity of leukemia cells to hexadecylphosphocholine)
IT
     Cell membrane
        (membrane phospholipid metabolism effect on antiproliferative sensitivity
        of leukemia cells to hexadecylphosphocholine)
TΤ
     Phosphatidylcholines, biological studies
     Phosphatidylethanolamines, biological studies
       Phosphatidylinositols
     Phosphatidylserines
     Phospholipids, biological studies
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (membrane phospholipid metabolism effect on antiproliferative sensitivity
        of leukemia cells to hexadecylphosphocholine)
IT 
     58066-85-6, Hexadecylphosphocholine
     RL: BAC (Biological activity or effector, except adverse); BSU (Biological
     study, unclassified); THU (Therapeutic use); BIOL (Biological study);
    USES (Uses)
        (membrane phospholipid metabolism effect on antiproliferative sensitivity
```